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# Environmental Management & Enrichment Facilities

Preliminary National
Environmental Policy Act
Activities
for the
Decontamination and
Decommissioning
for the
Portsmouth Gaseous
Diffusion Plant,
Piketon,Ohio





Managed by ta Pro2Serve Management Company, LLC for the Portsmouth/Paducah Project Office of the United States Department of Energy



This document is approved for public release per review by:

Henry Thomas

8/24/2006

PORTS Classification/Information Officer

Date

# Preliminary National Environmental Policy Act Activities for the Decontamination and Decommissioning of the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio

Date Issued - August 2006

Prepared for the U.S. Department of Energy Portsmouth/Paducah Project Office

THETA PRO2SERVE MANAGEMENT COMPANY, LLC managing the
Infrastructure Activities at the
Portsmouth Gaseous Diffusion Plant under contract DE-AC24-05OH20193
for the
U.S. DEPARTMENT OF ENERGY

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#### **ACRONYMS**

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CSB Cold Standby
CSD Cold Shutdown
CWA Clean Water Act
CX Categorical Exclusion

D&D Decontamination and Decommissioning

DOE U.S. Department of Energy
EA Environmental Assessment
EIS Environmental Impact Statement
FONSI Finding of No Significant Impact

IAG Interagency Agreement NCP National Contingency Plan

NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

PGDP Paducah Gaseous Diffusion Plant
PORTS Portsmouth Gaseous Diffusion Plant
PPPO Portsmouth/Paducah Project Office
RCRA Resource Conservation and Recovery Act

RCRA Resource Conservation and Recovery Act
RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

SHPO State Historic Preservation Office TSCA Toxic Substances Control Act

USEC United States Enrichment Corporation
U.S. EPA U.S. Environmental Protection Agency

#### **EXECUTIVE SUMMARY**

Environmental compliance is critical to the successful completion of any major U.S Department of Energy (DOE) project such as the decontamination & decommissioning (D&D) of the Portsmouth Gaseous Diffusion Plant (PORTS) (DOE 2003a). A summary of actions taken to integrate relevant environmental requirements and values into the project should be included in project planning documents. For major projects like the D&D of PORTS, a description of environmental management systems and engineering controls that have been established to address environmental issues should also be addressed. The National Environmental Policy Act (NEPA) of 1969 provides a description of how environmental factors are considered in the decision-making process to ensure that project decisions reflect environmental values.

The 3714-acre PORTS site is located in south-central Ohio in rural Pike County, approximately 22 miles north of Portsmouth, Ohio. Construction of the PORTS site began in late 1952. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. USEC was privatized in July 1998 and a corporate business decision was made in January 2000 to terminate uranium enrichment at PORTS in May 2001. The plant is currently in a cold shutdown mode. Planning and other preliminary activities are being conducted to prepare the plant for D&D.

The purpose of this Preliminary NEPA Activities Report is to document the requirements of the NEPA, the DOE NEPA Implementing Procedures (10 CFR Part 1021), DOE O 451.1B, and the National Environmental Policy Act Compliance Program (DOE 2001), as they relate to the PORTS D&D project, and describe preliminary NEPA actions to identify potential environmental issues so that project decisions reflect these issues and concerns.

NEPA requires a detailed evaluation of potential alternative actions, including a no action alternative, prior to the expenditure of significant federal funds. Although the emphasis traditionally is on environmental impacts during these evaluations, they are sufficiently broad to include other factors such as cost, schedule, socio-economics, waste management, transportation, and cumulative impacts with other ongoing or planned actions. For DOE D&D projects conducted under the rules of the Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA) non-time critical removal action, an environmental impacts analysis must be conducted incorporating NEPA values in lieu of performing a formal analysis as required by NEPA.

Whether potential environmental impacts from the D&D of PORTS are formally conducted under the NEPA process or by incorporating NEPA values under the CERCLA process, there are several preliminary NEPA/NEPA values activities that can or are being done that can serve to expedite the formal NEPA/NEPA values process. These include:

- Preparation of an Environmental Evaluation Checklist;
- Addressing DOE's thoughts and plans regarding D&D of PORTS at semi-annual public meetings;
- Preparation of a Programmatic Agreement with State Historic Preservation Office (SHPO) regarding compliance with the National Historic Preservation Act (NHPA); and

 Preparation of a list of existing reference documents that are executed to contain useful NEPA-related data for PORTS and documents that describe NEPA efforts at other DOE facilities and provide important evaluation process information.

These preliminary activities would provide early insight into potential environmental compliance issues facing DOE in the planning and execution of the D&D project at PORTS.

#### 1. INTRODUCTION

Environmental compliance is critical to the successful completion of any major U.S. Department of Energy (DOE) project such as the decontamination and decommissioning (D&D) of the Portsmouth Gaseous Diffusion Plant (PORTS) (DOE 2003a). A summary of actions taken to integrate relevant environmental requirements and values into the project should be included in project planning documents. For major projects like D&D of PORTS, a description of environmental management systems and engineering controls that have been established to address environmental issues should also be addressed. The National Environmental Policy Act (NEPA) of 1969 provides a description of how environmental factors are considered in the decision-making process to ensure that decisions reflect environmental values. The environmental analysis that identifies applicable Federal, state, and local statutes that affect the project should be documented. The analysis typically includes the environmental requirements checklist that is prepared early in the definition phase of the project. This information can then be utilized for other planning phases of the project to address such issues as permit requirements, historic preservation, protection of sensitive environmental habitats, etc.

#### 1.1 OBJECTIVES

The objectives of this Preliminary NEPA Activities Report are to identify the requirements of NEPA as they relate to the planning and execution of the D&D of PORTS and identify any early actions that should be accomplished to support or expedite the NEPA process.

#### 1.2 PURPOSE

The purpose of this Preliminary NEPA Activities Report is to document the requirements of the NEPA, the DOE NEPA Implementing Procedures (10 CFR Part 1021), and DOE O 451.1B (DOE 2001), as they relate to the D&D project at PORTS and describe preliminary NEPA actions to address potential environmental issues so that subsequent project decisions reflect these issues and concerns.

#### 1.3 BACKGROUND

The 3714-acre PORTS site is located in south-central Ohio in rural Pike County, approximately 22 miles north of Portsmouth, Ohio. It is situated approximately 75 miles south of Columbus, Ohio and 4.5 miles southeast of the village of Piketon. Construction of PORTS began in late 1952. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy.

From 1991 until production was ceased in 2001, PORTS produced only low-enriched uranium for commercial power plants. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. USEC was privatized in July 1998 and a corporate business decision was made in January 2000 to terminate uranium enrichment at PORTS in May 2001, while maintaining operation of the Paducah Gaseous Diffusion Plant (PGDP) in Paducah, Kentucky. A limited number of enrichment process facilities continued to be maintained in "Cold Standby" (CSB) with the intent that, if required, the diffusion process at PORTS could be restarted after a period of maintenance and rehabilitation. At the end of Fiscal Year 2005, the status of the CSB facilities was changed to "Cold Shutdown" (CSD). DOE and USEC are also using some

of the process facilities to support the technetium (<sup>99</sup>Tc) removal program. USEC is responsible for the operations and maintenance of all leased facilities at PORTS until their lease is terminated and these facilities are returned to DOE.

The plant currently employs approximately 1700 workers. Employees reside primarily in Ohio, Kentucky, and West Virginia. The majority of Ohio employees live within the four counties surrounding the plant: Scioto, Pike, Ross, and Jackson.

#### 2. OVERVIEW OF NEPA REQUIREMENTS

#### **2.1 NEPA**

NEPA requires that all federal agencies anticipate and consider environmental consequences prior to undertaking major actions (DOE 1994). Agencies are required to evaluate and prepare a statement on the environmental impact of every proposal for a federal action "significantly affecting the quality of the human environment."

NEPA was enacted in 1969 and implemented in accordance with the President's Council on Environmental Quality regulations (40 CFR Parts 1500 through 1508). NEPA was enacted to ensure that environmental, technical, and economic considerations are factored into the decisions of federal agencies. NEPA requires a detailed evaluation of potential alternative actions, including a no action alternative, prior to the expenditure of significant federal funds. Although the emphasis traditionally is on environmental impacts during these evaluations, they are sufficiently broad to include other factors such as cost, schedule, socio-economics, waste management, transportation, and cumulative impacts with other ongoing or planned actions. Compliance with other environmental laws and regulations must also be evaluated. These typically include:

- The Resource Conservation and Recovery Act (RCRA);
- The Endangered Species Act;
- The Coastal Zone Management Act;
- The National Historic Preservation Act (NHPA);
- The Wild and Scenic Rivers Act;
- The Archaeological Resources Protection Act;
- The National Pollution Discharge Elimination System (NPDES) Storm Water Program mandated under the Clean Water Act (CWA);
- The NPDES Permitted Discharges Program mandated under the CWA;
- The Clean Air Act;
- The Toxic Substances Control Act (TSCA);

- The Floodplains/Wetlands Regulations;
- The American Indian Religious Freedom Act;
- The Farmland Protection Policy Act;
- The Fish and Wildlife Coordination Act; and
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

DOE implements its NEPA responsibilities through the DOE NEPA Rule (10 CFR 1021), DOE Orders, and various support and guidance documents. The DOE NEPA Compliance Program (DOE 2001) provides for effective planning and management of DOE NEPA processes.

The DOE NEPA Rule, Section 1021.400, identifies DOE actions that normally: (1) do not require the preparation of either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) (i.e., are categorically excluded from preparation of either document); (2) require the preparation of an EA, but not necessarily an EIS; and (3) require the preparation of an EIS.

If a DOE proposed action is not encompassed within one of these DOE actions, or if there are extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposed action, DOE will either: (1) prepare an EA and, on the basis of that EA, determine whether to prepare an EIS or a Finding of No Significant Impact (FONSI); or (2) prepare an EIS and a Record of Decision (ROD).

Regardless of the level of NEPA review, project design normally would not move beyond the preliminary (conceptual) stages until a decision is made to proceed with the action after evaluating the results of the NEPA review. The need for various permits would be identified in the NEPA document and might include permits such as: Ohio Permit-to-Install, Air Emission Source, NPDES, Solid Waste Landfill, RCRA Landfill, and TSCA Landfill. The permitting process would be handled directly with the permitting agencies as part of the design and construction process.

NEPA regulations provide information that specifically addresses the application of Categorical Exclusions (CX) for certain DOE actions. The DOE NEPA Implementing Regulations, Section 1021.400(a), provide direction for the application of CXs for DOE actions that do not require an EA or an EIS. Section 1021.400 of the DOE NEPA Implementing Regulations provides direction for the application of the appropriate level of NEPA review and provides a caveat for extraordinary circumstances that might allow DOE to proceed with an action in exception to this direction. Subpart D, Appendices A and B of the DOE NEPA Implementing Regulations provides a listing of classes of actions that DOE has determined do not individually or cumulatively have a significant effect on the human environment and thus may normally be categorically excluded.

The classes of actions that normally would lead to a CX include the following conditions as integral elements. To fit within the classes of actions that would normally require a CX, a proposal must be one that would not:

• Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;

- Require siting construction or major expansion of waste storage, disposal, recovery, or treatment
  facilities (including incinerators), but the proposal may include categorically excluded waste storage,
  disposal, recovery, or treatment actions;
- Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural
  gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted
  releases; or
- Adversely affect environmentally sensitive resources (e.g., construction of a building with its
  foundation above a sole-source aquifer or upland surface soil removal on a site that has wetlands). An
  action may be categorically excluded if, although sensitive resources are present on a site, the action
  would not adversely affect those resources.

If these criteria cannot be met, then either an EA or an EIS will need to be prepared. Classes of actions that normally would require the preparation of an EIS include such major DOE actions as siting, construction, operation, and decommissioning of whole facilities or adding main transmission systems.

An EA should normally be prepared for a proposed DOE action that is not clearly categorically excluded or does not clearly require the preparation of an EIS in order to assist agency planning and decision making.

A DOE EA shall serve the purposes identified in 40 CFR 1508.9(a), which includes providing sufficient evidence and analysis for determining whether to prepare an EIS or to issue a FONSI. An EA should include brief discussions of the need for the proposed action, alternatives to the proposed action including the no-action alternative, the environmental impacts of the proposed action alternatives, and a listing of agencies and persons consulted. If appropriate, a DOE EA should also include any floodplain/wetlands assessments prepared under 10 CFR Part 1022 and may include analyses needed for other environmental determinations.

NEPA requires DOE (and other federal agencies) to involve regulators and the public in decision making related to any undertaking that commits major expenditure of federal funds. If the undertaking is significant enough to warrant an EIS, the process is initiated by publishing a Notice of Intent (NOI) in the Federal Register to inform the public that an EIS will be prepared and to formally announce the beginning of the scoping process. The NOI describes the proposed action and the agency's preliminary plans regarding the consideration of reasonable alternatives and the analysis of potential impacts.

Mechanisms for public involvement are particularly at the forefront in NEPA implementation. Following the NOI, the next step in the process is to provide a public scoping meeting to facilitate the collection of public comments. DOE guidance documents provide substantial insight into the effective preparation and approach for facilitating public meetings as part of the NEPA implementation.

The development of the draft EIS involves identification of the competing potential alternatives, the collection of data and information to support the effective evaluation of the alternatives, and documentation of assumptions and methodologies used in the analysis. All reasonable alternatives are identified in the draft EIS. Once complete, the draft EIS is published for federal, state, local government, and public comments for a period of 45 days.

Comments are considered, responded to, and incorporated into the agency's decision, which is published as the final EIS. The final EIS identifies the agency's preferred alternative. Its publication is announced in the Federal Register in a Notice of Availability. A minimum 30-day waiting period is followed by the issuance of a ROD by the agency.

The ROD presents the agency's decision on the proposed action and the reasons for the decision, including environmental considerations and other factors such as cost and technical feasibility. The ROD is also published in the Federal Register. The ROD must include the identification of the most environmentally beneficial alternative, even if it is not the alternative that has been selected.

#### 2.2 CERCLA

Congress passed CERCLA in response to growing national concern about the release of hazardous substances from abandoned waste sites. CERCLA gives the federal government authority to regulate hazardous substances, to respond to hazardous substance emergencies, and to develop long-term solutions for the nation's most critical hazardous waste problems. The Superfund Amendments and Reauthorization Act expanded the federal government's response authorities and clarified that federal facilities are subject to the same CERCLA requirements as private industries.

Under CERCLA, the National Response Center must be notified of releases or threatened releases of hazardous substances above certain quantities (40 CFR 302) unless a federal permit authorizes the release. CERCLA's Community Right-to-Know requirements (40 CFR 350, 355, 370, 372) also mandate that state and local emergency response authorities be notified.

CERCLA response efforts are guided by the National Oil and Hazardous Substances Pollution Contingency Plan, commonly referred to as the National Contingency Plan (NCP). The NCP (40 CFR 300) describes the process that responsible parties (including federal agencies) must follow in response to releases of hazardous substances into the environment. The NCP establishes the criteria, methods, and procedures that the U.S. Environmental Protection Agency (U.S. EPA) uses to determine which releases have priority for long-term evaluation and response. The NCP's goal is to select remedies that protect human health and the environment, maintain protection over time, and minimize waste generation.

Under the NCP, response actions include remedial and removal actions. The remedial action process, which typically includes extensive studies to support remedy selection, may take several years to plan and complete. U.S. EPA and DOE agreed that generally decommissioning of facilities, where the primary release potential is the residual contamination remaining at the facility, would not warrant the extensive studies needed for remedial action remedy selection and therefore would be conducted using the simpler, more expedient, removal action process. NCP's removal actions are categorized as (1) emergency removal actions, (2) time-critical removal actions, and (3) non-time critical removal actions. The NCP requires public involvement in the removal action planning process, through the administrative record process, public notices/meetings, and other mechanisms. The NCP evaluates the need for removal actions based on impacts on human health and the environment, materials in bulk containers that may leak, threat of migration in soil and water, and the threat of fire.

Under CERCLA, the U.S. EPA prepares the National Priorities List (NPL), a prioritized list of highly contaminated sites. Candidate sites are selected after being ranked according to the Hazard Ranking System, which evaluates the relative risk of contaminated sites. Potential NPL sites are published in the Federal Register for public commenting. Sites placed on this list will have a Remedial Investigation/Feasibility Study (RI/FS) conducted and a ROD prepared to establish clean-up requirements. Once appropriately cleaned, sites will be delisted. For DOE facilities listed on the NPL, CERCLA requires DOE and the U.S. EPA to enter into an Interagency Agreement (IAG) defining the requirements for cleanup. PORTS is not currently considered an NPL site and is not a candidate site.

IAGs may also be entered into for non-NPL sites in order to incorporate RCRA requirements at CERCLA sites for facilities subject to both statutes so that there is only one, comprehensive agreement. The state is usually a party to the IAG. Among other things, IAGs establish the roles of DOE, U.S. EPA, and the state in completing the removal action. An IAG may contain provisions for public and stakeholder involvement in the removal action process. When no IAG exists for a site, or where an existing IAG does not address the removal action, DOE and U.S. EPA should identify the steps in the removal action process where U.S. EPA involvement can be most effective.

At facilities where CERCLA applies, the NCP mandates public involvement in the response action decision-making process. At facilities where RCRA applies, public involvement is governed by 40 CFR 270, EPA Administered Permits: The Hazardous Waste Management Program, or equivalent state regulations, or as specified in other state orders or agreements.

Preliminary plans are for DOE to conduct the D&D of PORTS as a non-time critical removal action under CERCLA with DOE acting as the lead agency. This approach is authorized by the Executive Order 12580: *Superfund Implementation* in which the President delegates authority vested in him by Section 115 of CERCLA to various government entities. Section 2 of Executive Order 12580 specifically states:

"(e)(1) Subject to subsections (a), (b), (c), and (d) of this Section, the functions vested in the President by Sections 104(a), (b), and (c)(4), and 121 of the Act (42 U.S.C. 9604(a), (b), (c)(4), 9621) are delegated to the heads of Executive departments and agencies, with respect to remedial actions for releases or threatened releases which are not on the National Priorities List ("the NPL") and removal actions other than emergencies, where either the release is on or the sole source of the release is from any facility or vessel under the jurisdiction, custody or control of those departments and agencies, including vessels bare-boat chartered and operated. The Administrator shall define the term "emergency", solely for the purposes of this subsection, either by regulation or by a memorandum of understanding with the head of an Executive department or agency."

The approach for implementing this delegated authority, agreed upon with U.S. EPA, is documented in the U.S. EPA/DOE Interagency Agreement *Policy on Decommissioning of Department of Energy Facilities Under CERCLA* (DOE 1995). This policy states that the National Contingency Plan designates DOE as the lead agency for responding to releases on, or where the sole source of the release is from, a facility under DOE's jurisdiction, custody, or control.

This Policy was signed in May 1995 by the Assistant Administrator of the U.S. EPA and by DOE's Assistant Secretary for Environmental Management. It establishes an agreement between U.S. EPA and DOE providing a tailored approach for decommissioning DOE's contaminated facilities as non-time critical removal actions. Subsequent guidance documents established a decommissioning framework (DOE 1999) that implements the requirements placed on decommissioning activities by the Decommissioning Policy and DOE Order O 430.1A (DOE 1998). This model for decommissioning DOE facilities has been designed explicitly to accommodate all types of regulatory scenarios under which decommissioning can be initiated. Although modeled after the process for conducting CERCLA non-time critical removal actions, the basic framework is flexible enough to accommodate all DOE decommissioning projects, regardless of the statute, authority, or management decision that initiates the project. This option usually provides benefits for worker safety, public health, and the environment, because it is typically faster and more cost effective than other options.

A common step in the CERCLA non-time critical removal action process and the DOE decommissioning model is the evaluation of alternatives. The Secretarial Policy on the National

Environmental Policy Act (NEPA) (DOE 1994), provides for incorporating NEPA values into CERCLA documents, such as analysis of cumulative, off-site, ecological, and socioeconomic impacts, to the extent practicable. If decommissioning is performed as a DOE decommissioning model process, an evaluation comparable to that which would be performed under a separate NEPA review should be incorporated under the step involving the evaluation of alternatives and no further NEPA review should be required.

#### 3. PRELIMINARY NEPA ACTIVITIES

#### 3.1 ENVIRONMENTAL EVALUATION CHECKLIST

Initial analysis to identify applicable federal, state, and local statutes that would affect a project typically would utilize an environmental review checklist. Completing a draft environmental review checklist for the D&D project as a preliminary NEPA/NEPA values activity, even though the scope has not at this time been thoroughly defined, would help expedite the formal NEPA/NEPA values process once the project is underway. DOE Portsmouth/Paducah Project Office (PPPO) has prepared such a checklist in the form of its Environmental Evaluation Checklist for projects at PORTS and PGDP. A copy of this checklist can be found in the Appendix of this report. This checklist has been partially completed as part of the preparation of this report, which was prepared based on current available details regarding the D&D project. As the project scope becomes better defined, this checklist can be refined so that by the time DOE is ready to begin the formal NEPA/NEPA values process, most of the preliminary applicability analysis has been completed.

#### 3.2 STAKEHOLDER COMMUNICATION

DOE's existing community relations program (DOE 2004) at PORTS, required by the 1989 Ohio Environmental Protection Agency Consent Order and U.S. EPA Administrative Order by Consent, has been in effect since the early 1990s. The program was designed to establish a communications program for providing information on DOE's Environmental Remediation Program on a timely basis, soliciting input from the public, and addressing the concerns and perceptions described in the preceding section. Communications efforts, therefore, place emphasis on the progress of the investigation and cleanup actions while providing an overall description of the environmental management activities and DOE missions at the site. These efforts include discussions on DOE missions such as transitioning the gaseous diffusion plant from CSB to CSD and preparing for future D&D of gaseous diffusion facilities; environmental remediation and monitoring activities; waste generation, storage, treatment, and disposal practices; management of the on-site storage of DUF<sub>6</sub> cylinders; health, safety, and emergency preparedness issues; and long-term stewardship and end-state land use. Public meetings are generally held every six months. This forum is an excellent venue for early communication with stakeholders regarding DOE's plans for the D&D project. As a preliminary NEPA/NEPA values activity, information on DOE's pre-D&D activities should continue to be communicated at these public meetings to solicit feedback that may help DOE in its early planning process (DOE 2003b and DOE 2003c). Once the formal NEPA/NEPA values process begins, these public meetings should continue in order to provide an important stakeholder communication tool regarding DOE's plans and decisions for the D&D project.

#### 3.3 HISTORIC PRESERVATION MEMORANDUM OF AGREEMENT

The NHPA, enacted in 1966, requires federal agencies to take into account the effects of their undertakings on historic properties. Consultations with Ohio's State Historic Preservation Office (SHPO) and consulting parties provide opportunity to comment on such undertakings. At the early stages of project planning the Sect. 106 process under the enacting regulations (36 CFR 800) seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess the project impact on these historic properties, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Compliance with NHPA is one of the items that is addressed during the NEPA/NEPA values process. Early resolution of historic preservation issues with SHPO could help expedite the NEPA/NEPA values process. One way of accomplishing this is through the preparation of a programmatic agreement between DOE and SHPO that addresses how potentially historic structures and other cultural resources will be managed during the D&D project. Efforts are underway at PORTS by the Site Remediation Contractor to prepare a draft programmatic agreement. These efforts should continue as a preliminary NEPA/NEPA values activity.

#### 3.4 EXISTING DOCUMENTATION

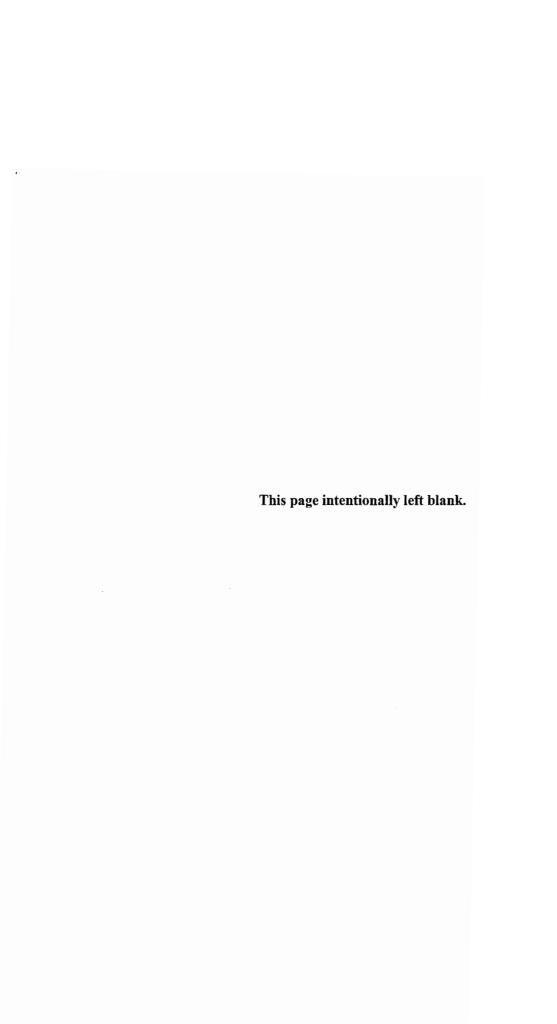
In implementing the NEPA/NEPA values process in the D&D project, use of existing documentation containing the results of previous studies at PORTS is expected to add efficiency and institutional knowledge to the project. Similarly, NEPA documents from other DOE facilities can be expected to provide insights into the processes used elsewhere. A listing of candidate reference documents, including an indication of the nature of the relevant information contained in it, will be prepared in advance of the start of the D&D project and the associated NEPA/NEPA values process. Such a listing could be expected, for example, to include any references used to provide answers to the questions on the environmental checklist described in Sect. 3.1 of this report.

#### 4. CONCLUSIONS

Whether the potential environmental impacts from the D&D of PORTS are formally conducted under the NEPA process or by incorporating NEPA values under the CERCLA process, there are several preliminary NEPA/NEPA values activities that should or are being done that will serve to expedite the formal NEPA/NEPA values process. These include:

- Preparation of an Environmental Evaluation Checklist;
- Addressing DOE's thoughts and plans regarding D&D of PORTS at semi-annual public meetings;
- Preparation of a Programmatic Agreement with SHPO regarding compliance with the NHPA; and

| <ul> <li>Preparation of a list of existing reference documents that are expected to contain useful NEPA-related</li> </ul>   |
|--|
| data for PORTS and documents that describe NEPA efforts at other DOE facilities and provide important evaluation process information.  |
| These preliminary activities will provide early insight into potential environmental compliance issues facing DOE in the planning and execution of the D&D project at PORTS. |
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#### 5. REFERENCES

- Code of Federal Regulations, 10 CFR Part 1021, DOE NEPA Implementing Procedures.
- Code of Federal Regulations, 10 CFR 1022, Compliance with Floodplain/Wetlands Environmental Review Requirements.
- Code of Federal Regulations, 36 CFR 800, Protection of Historic Properties.
- Code of Federal Regulations, 40 CFR 270, EPA Administered Permits: The Hazardous Waste Management Program.
- Code of Federal Regulations, 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan.
- Code of Federal Regulations, 40 CFR 302, Designation Reportable Quantities and Notification.
- Code of Federal Regulations, 40 CFR 350, 355, 370, 372, Emergency Planning and community Right-to-Know Regulations.
- Code of Federal Regulations, 40 CFR Parts 1500-1508, Regulations for Implementing NEPA.
- DOE (U.S. Department of Energy) 1994. Secretarial Policy Statement on the National Environmental Policy Act.
- DOE 1995. Memorandum, Policy on Decommissioning of Department of Energy Facilities Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- DOE 1998. Lifecycle Asset Management, DOE 0430.1A.
- DOE 1999. Decommissioning Implementation Guide, DOE G 430.1-4.
- DOE 2000. The DOE Decommissioning Handbook, DOE/EM-0383.
- DOE 2001. National Environmental Policy Act compliance Program, DOE O 451.1B, Change 1.
- DOE 2003a. U.S. Department of Energy, Office of Management, Budget and Evaluation, *Project Management Practices, Project Execution Plan*, Rev. E.
- DOE 2003b. Public Participation and Community Relations, DOE P 141.2.
- DOE 2003c. U.S. Department of Energy, Office of Management, Budget and Evaluation, Communications and Stakeholder Participation.
- DOE 2004. Portsmouth Gaseous Diffusion Plant Corrective Measures Implementation Program, Program Community Relations Plan.

# **APPENDIX** ENVIRONMENTAL EVALUATION CHECKLIST



#### U.S. Department of Energy Portsmouth/Paducah Project Office

#### **Environmental Evaluation Checklist**

PPPO-F-450.1 Revision 1 February 2006

#### **National Environmental Policy Act Review**

| Submit one co  |   | ortion of the checklist<br>clist with supplemental information to<br>to PPPO NEPA Compliance Officer   | - 1   |
|--|---|--|---|
| Activity title and project n<br>Decontamination and Dec  |   | mouth Gaseous Diffusion Plant  | Date: 7/24/06   |
| Project contact name   | Telephone number  | DOE Project Coordinator  | Telephone number  |
| Activity start date  | Activity end date   | Estimated cost   | Activity location   |
| The project scope is to decontar<br>other facilities that are auxiliary<br>equipment will be removed and | minate and decommission the Po<br>to the gaseous diffusion proces<br>disposed, the structures and aux<br>diated, as necessary. These action | ortsmouth Gaseous Diffusion Plant (PORTS) of s. The facilities will be characterized, the haciliary buildings will be demolished and dispons will eliminate the potential for future release | process equipment, process buildings, and the azardous materials will be abated, the process osed, and contaminated soils and groundwater uses of contaminants from the PORTS site in a |
| Detailed description: (Attac   | ch additional pages for description   | n if necessary and include reference document  | as)   |

#### National Environmental Policy Act (NEPA) Checklist

| Questions to answer: *A checklist is required to be submitted, evaluated, and approved for all proposed   | Yes                  | No                |
|---|----------------------|-------------------|
| site actions and projects that have the potential to meet any of the following:   |                      |                   |
| 1. Will this activity result in a change in emissions, generation rates, or new discharge of hazardous, mixed, radioactive, asbestos, PCB, sanitary/industrial, solid or liquid waste, petroleum substance, wastewater, or any other pollutants from a facility or process? | $\boxtimes$          |                   |
| 2. Will this activity be located in a previously developed area?  | $\boxtimes$          |                   |
| 3. Will this activity involve siting, construction, modification, renovation, closure or D&D of facilities or processes?  |                      | H                 |
| 4. Will this activity potentially affect environmentally sensitive areas/resources such as flood plain/wetlands,  | _                    |                   |
| archeologically or historically significant areas, threatened or endangered species, and/or their habitat, special water sources (e.g. aquifer)?  |                      |                   |
| 5. Will this activity involve site characterization, environmental monitoring, or R&D programs?   | $\boxtimes$          |                   |
| 6. Will this activity involve any type of land disturbance, underground storage tank (UST), or subsurface   | $\boxtimes$          |                   |
| injection/extraction? 7. Will this activity involve a site evaluation area, RCRA/CERCLA area/facility?  | $\boxtimes$          | $\overline{\Box}$ |
| *Note:  | <u> </u>             |                   |
| - If any unknown, call DOE PPPO NEPA Compliance Officer or Project Environmental Coordinator for consultation   |                      |                   |
| - Consult with DOE PPPO NEPA Compliance Officer or Project Environmental Coordinator; file with project & complet   | e permits che        | cklist            |
| - If any are marked "Yes", complete rest of NEPA checklist and permits checklist  |                      |                   |
| Francisco de II anno de El alcada con esta de la companya de II anno de El alcada con esta de la companya de I  |                      |                   |
| Environmental Impacts Evaluation (Note: If any are "Yes", provide specifics/supplemental info   | ormation.)           |                   |
| Will there be a new air emission or a change in the quantity of an existing air emission?   |                      |                   |
| Surface Water   |                      |                   |
| Will there be a liquid release to streams, swamps, wetlands, seepage basins, storm drains, process sewers, ponds, or  | $\boxtimes$          |                   |
| lakes?  |                      |                   |
| Will river or stream water be utilized?  Groundwater  |                      |                   |
| Will there be a discharge to subsurface/groundwater?  | П                    |                   |
| Will groundwater be utilized?   |                      |                   |
| Safety  | <u> </u>             |                   |
| Is there a potential exposure to hazardous substances (e.g. radiological/toxic/chemical materials)?   |                      |                   |
| Is there a potential for explosion or criticality?  |                      |                   |
| Does action involve transportation of hazardous materials?  | $\overline{\square}$ |                   |
| Natural/Cultural Resources  |                      |                   |
| Is there a potential for impacts on wetlands, swamps, streams, river beds, ponds, set aside areas?  |                      |                   |
| Is there a potential impact on fish/wildlife resources or habitats?   | $\boxtimes$          |                   |
| • Is there a potential impact on protected species (e.g. sensitive, rare, threatened, or endangered)?   |                      |                   |
| Is there a potential for impacting archaeological and historical sites?   |                      |                   |
| Does this action require an excavation permit?  |                      |                   |
| For DOE PPPO NEPA Compliance Officer use only (NEPA recommendation)   |                      |                   |
| Are there potential cumulative effects when combined with other actions?  | <u> </u>             | _Ц_               |
| Is the proposed activity a component of a larger line item project?      Write in document title or reference   |                      |                   |
| number:   |                      |                   |
| CX applied for by DOE Project Coordinator (Must meet all requirements of 10 CFR 1021.410(b)):   |                      |                   |
| Covered by previous NEPA documentation (CX, EA, EIS): (Write in document title or reference number)   |                      |                   |
|   |                      |                   |
| Additional NEPA documentation required: EA EIS Revised ROD Revised F  | ONSI 🔲               | EE/CA             |
| DOE Project Coordinator signature Date checklist completed:   |                      |                   |
| T. DOT DEDO VEDI C. II. OCT. VI O I OUDDI I I I I I   |                      |                   |
| For DOE PPPO NEPA Compliance Officer Use Only (NEPA determination)  |                      |                   |
|   |                      |                   |
|   |                      |                   |
| Approved Approved - with comments NOT approved - alternate NEPA   | action req           | uired             |
| DOE PPPO NEPA Compliance Officer signature  Date of signature:  |                      |                   |

## **Environmental Permits Checklist**

| Wastes  |                         |              |                                       |          |       | Yes                 | No          |    |
|---|-------------------------|--------------|---------------------------------------|----------|-------|---------------------|-------------|----|
| Will the proposed activity install, construct, mod  | lify, demolis           | sh, close, o | or otherwise impact a Ro              | CRA 1    | perm  | itted facility?     | $\square$   |    |
| <ul> <li>Will the proposed activity generate a mixed was</li> </ul>                                 | te?                     |              |                                       |          |       |                     |             |    |
| <ul> <li>If "Yes", does a waste stream with similar chara</li> </ul>                                |                         | rrently exi  | st at the site?                       |          |       |                     | $\boxtimes$ |    |
| <ul> <li>Will the proposed activity generate a hazardous</li> </ul>                                 | waste?                  |              |                                       |          |       |                     | $\square$   |    |
| <ul> <li>Is the TSD permitted to accept this waste?</li> </ul>                                      |                         |              |                                       |          |       |                     |             |    |
| (If "Yes", provide the following)   |                         |              |                                       |          |       |                     |             |    |
| Name of receiving facility  |                         |              |                                       |          |       | <del></del>         |             |    |
| Source used to confirm facility can accept waste:   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       | <del></del>         |             |    |
| <ul> <li>Is this activity to take place at an existing TSD?</li> </ul>                              |                         |              |                                       |          |       |                     |             |    |
| <ul> <li>Would this activity impact an existing TSD?</li> </ul>                                     |                         |              |                                       |          |       |                     |             |    |
| ACHV P. J. C.B.   | 1 17                    | 1 57         |                                       |          |       |                     | ļ.,         |    |
| (If "Yes", answer the following)  1. Does it involve polychlorinated                                | Yes 🖂                   | No 🗆         |                                       |          |       |                     | Yes         | No |
| biphenyls (PCB)?  |                         |              |                                       |          |       |                     |             |    |
| 2. Will this activity continue for more than  |                         |              | <ol> <li>Does it involve t</li> </ol> | he pla   | cem   | ent of hazardous    |             |    |
| 30 days?  |                         | _            | waste on the land or                  |          |       |                     |             |    |
|   |                         |              |                                       | waste    | ?     |                     |             |    |
| Waste Identification, Generation and M  |                         |              |                                       |          |       |                     | Yes         | No |
| Will the proposed activity disturb soil, sludge or  |                         | near a RC    | CRA/CERCLA unit or si                 | ite eva  | luati | on area?            |             |    |
| If "Yes", were any listed wastes disposed of at t   |                         |              |                                       |          |       |                     |             |    |
| <ul> <li>Does this activity result in a new liquid and/or s</li> </ul>                              |                         |              |                                       | s), or a | cha   | nge in the          |             |    |
| quantity or the characteristic of an existing wast  TRU   | e stream? If<br>Hazardo |              | eck all that apply:                   | Ī        | 7     | TSCA (PCB)          |             | L  |
| Mixed – Covered by FFCA   |                         | hazardous    |                                       | - F      |       | Wastewater          |             |    |
| ☐ Low-level ☐   |                         | /Industria   |                                       | ┝        | =     | Acute Hazardous     |             |    |
| High-level  | Used/W                  |              |                                       |          | 1-    | Other               |             |    |
| Where will the waste be stored/disposed/treated?  | 1 0000                  | 4010 011     |                                       |          |       | 011101              |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
| Is the facility permitted to manage this waste?   |                         |              |                                       |          |       |                     |             |    |
| If "Yes", complete the following items and submi  |                         |              |                                       |          |       |                     |             |    |
| Source utilized to confirm facility is permi  Description of generated waste                        | ned to accep            | ot the wasi  | le .                                  |          |       |                     |             |    |
| Dates generation is to begin/end  |                         |              |                                       |          |       |                     |             |    |
| Estimate of waste generation rate for each  | category                |              |                                       |          |       |                     |             |    |
| Description of activity/process generating  |                         |              |                                       |          |       |                     |             |    |
| Description of waste reduction principles (   |                         | volume,      | mass, or toxicity) for the            | is acti  | vity  |                     |             |    |
| Is there a waste disposition location and af  | filiated sche           | dule? If y   | es please provide location            | on and   | pro   | posed schedule as a | ttachment.  |    |
|   |                         | / 11         |                                       |          |       |                     | <del></del> |    |
| Has the proposed activity been evaluated for wa     For Project Environmental Coordinator use only: | iste minimiz            | ation/poll   | ution prevention?                     |          |       |                     |             |    |
| Poi Project Environmental Coordinator use only.   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |
| Project Environmental Coordinator signat  | ure                     |              | Date checklist co                     | mp1      | ted.  |                     |             |    |
|   |                         |              | Date checklist Co.                    | hic      | iou.  |                     |             |    |
|   |                         |              |                                       |          |       |                     |             |    |



DOE Contract No. DE-AC24-05OH20193 OP-06-079 August 25, 2006

Mr. Jud Lilly, Federal Project Director Portsmouth/Paducah Project Office U.S. Department of Energy P. O. Box 700 Piketon, Ohio 45661

U.S. Department of Energy (DOE) Contract No. DE-AC24-05OH20193: Preliminary National Environmental Policy Act (NEPA) Activities for the Decontamination and Decommissioning (D&D) of the Portsmouth Gaseous Diffusion Plant (PORTS)

Dear Mr. Lilly:

Please find enclosed the Preliminary NEPA Activities for the D&D of PORTS (TPMC/PORTS-86/R1). Comments were received from DOE and incorporated into the enclosed revised document. This document completes Action No. 90 on the Pre-D&D tracker.

If you have any questions or wish to discuss the status of this action item further, please contact me at (740) 897-3762.

Sincerely,

Roger D. McDermott

**VP** Operations

Theta Pro2Serve Management Company, LLC

RDM:am

Enclosure

Mr. Jud Lilly OP-06-079 August 25, 2006 Page 3

bc:

Bob Anderson, Pro2Serve Lottie Christian, Theta Cathy Forshey, TPMC Tom Houk, TPMC





# Managed by ta Pro2Serve Management Company, LLC for the Portsmouth/Paducah Project Office of the United States Department of Energy

# Environmental Management & Enrichment Facilities

Preliminary National
Environmental Policy Act
Activities
for the
Decontamination and
Decommissioning
for the
Portsmouth Gaseous
Diffusion Plant,
Piketon,Ohio



This document is approved for public release per review by:

Henry Thomas 8/24/2006

PORTS Classification/Information Officer

Date

# Preliminary National Environmental Policy Act Activities for the Decontamination and Decommissioning of the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio

Date Issued - August 2006

Prepared for the U.S. Department of Energy Portsmouth/Paducah Project Office

THETA PRO2SERVE MANAGEMENT COMPANY, LLC managing the
Infrastructure Activities at the
Portsmouth Gaseous Diffusion Plant under contract DE-AC24-05OH20193
for the
U.S. DEPARTMENT OF ENERGY

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#### **ACRONYMS**

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CSB Cold Standby
CSD Cold Shutdown
CWA Clean Water Act
CX Categorical Exclusion

D&D Decontamination and Decommissioning

DOE U.S. Department of Energy
EA Environmental Assessment
EIS Environmental Impact Statement
FONSI Finding of No Significant Impact

IAG Interagency Agreement NCP National Contingency Plan

NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

PGDP Paducah Gaseous Diffusion Plant
PORTS Portsmouth Gaseous Diffusion Plant
PPPO Portsmouth/Paducah Project Office
RCRA Resource Conservation and Recovery Act

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

SHPO State Historic Preservation Office TSCA Toxic Substances Control Act

USEC United States Enrichment Corporation
U.S. EPA U.S. Environmental Protection Agency

#### **EXECUTIVE SUMMARY**

Environmental compliance is critical to the successful completion of any major U.S Department of Energy (DOE) project such as the decontamination & decommissioning (D&D) of the Portsmouth Gaseous Diffusion Plant (PORTS) (DOE 2003a). A summary of actions taken to integrate relevant environmental requirements and values into the project should be included in project planning documents. For major projects like the D&D of PORTS, a description of environmental management systems and engineering controls that have been established to address environmental issues should also be addressed. The National Environmental Policy Act (NEPA) of 1969 provides a description of how environmental factors are considered in the decision-making process to ensure that project decisions reflect environmental values.

The 3714-acre PORTS site is located in south-central Ohio in rural Pike County, approximately 22 miles north of Portsmouth, Ohio. Construction of the PORTS site began in late 1952. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. USEC was privatized in July 1998 and a corporate business decision was made in January 2000 to terminate uranium enrichment at PORTS in May 2001. The plant is currently in a cold shutdown mode. Planning and other preliminary activities are being conducted to prepare the plant for D&D.

The purpose of this Preliminary NEPA Activities Report is to document the requirements of the NEPA, the DOE NEPA Implementing Procedures (10 CFR Part 1021), DOE O 451.1B, and the National Environmental Policy Act Compliance Program (DOE 2001), as they relate to the PORTS D&D project, and describe preliminary NEPA actions to identify potential environmental issues so that project decisions reflect these issues and concerns.

NEPA requires a detailed evaluation of potential alternative actions, including a no action alternative, prior to the expenditure of significant federal funds. Although the emphasis traditionally is on environmental impacts during these evaluations, they are sufficiently broad to include other factors such as cost, schedule, socio-economics, waste management, transportation, and cumulative impacts with other ongoing or planned actions. For DOE D&D projects conducted under the rules of the Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA) non-time critical removal action, an environmental impacts analysis must be conducted incorporating NEPA values in lieu of performing a formal analysis as required by NEPA.

Whether potential environmental impacts from the D&D of PORTS are formally conducted under the NEPA process or by incorporating NEPA values under the CERCLA process, there are several preliminary NEPA/NEPA values activities that can or are being done that can serve to expedite the formal NEPA/NEPA values process. These include:

- Preparation of an Environmental Evaluation Checklist;
- Addressing DOE's thoughts and plans regarding D&D of PORTS at semi-annual public meetings;
- Preparation of a Programmatic Agreement with State Historic Preservation Office (SHPO) regarding compliance with the National Historic Preservation Act (NHPA); and

 Preparation of a list of existing reference documents that are executed to contain useful NEPA-related data for PORTS and documents that describe NEPA efforts at other DOE facilities and provide important evaluation process information.

These preliminary activities would provide early insight into potential environmental compliance issues facing DOE in the planning and execution of the D&D project at PORTS.

#### 1. INTRODUCTION

Environmental compliance is critical to the successful completion of any major U.S. Department of Energy (DOE) project such as the decontamination and decommissioning (D&D) of the Portsmouth Gaseous Diffusion Plant (PORTS) (DOE 2003a). A summary of actions taken to integrate relevant environmental requirements and values into the project should be included in project planning documents. For major projects like D&D of PORTS, a description of environmental management systems and engineering controls that have been established to address environmental issues should also be addressed. The National Environmental Policy Act (NEPA) of 1969 provides a description of how environmental factors are considered in the decision-making process to ensure that decisions reflect environmental values. The environmental analysis that identifies applicable Federal, state, and local statutes that affect the project should be documented. The analysis typically includes the environmental requirements checklist that is prepared early in the definition phase of the project. This information can then be utilized for other planning phases of the project to address such issues as permit requirements, historic preservation, protection of sensitive environmental habitats, etc.

#### 1.1 OBJECTIVES

The objectives of this Preliminary NEPA Activities Report are to identify the requirements of NEPA as they relate to the planning and execution of the D&D of PORTS and identify any early actions that should be accomplished to support or expedite the NEPA process.

#### 1.2 PURPOSE

The purpose of this Preliminary NEPA Activities Report is to document the requirements of the NEPA, the DOE NEPA Implementing Procedures (10 CFR Part 1021), and DOE O 451.1B (DOE 2001), as they relate to the D&D project at PORTS and describe preliminary NEPA actions to address potential environmental issues so that subsequent project decisions reflect these issues and concerns.

#### 1.3 BACKGROUND

The 3714-acre PORTS site is located in south-central Ohio in rural Pike County, approximately 22 miles north of Portsmouth, Ohio. It is situated approximately 75 miles south of Columbus, Ohio and 4.5 miles southeast of the village of Piketon. Construction of PORTS began in late 1952. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy.

From 1991 until production was ceased in 2001, PORTS produced only low-enriched uranium for commercial power plants. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. USEC was privatized in July 1998 and a corporate business decision was made in January 2000 to terminate uranium enrichment at PORTS in May 2001, while maintaining operation of the Paducah Gaseous Diffusion Plant (PGDP) in Paducah, Kentucky. A limited number of enrichment process facilities continued to be maintained in "Cold Standby" (CSB) with the intent that, if required, the diffusion process at PORTS could be restarted after a period of maintenance and rehabilitation. At the end of Fiscal Year 2005, the status of the CSB facilities was changed to "Cold Shutdown" (CSD). DOE and USEC are also using some

of the process facilities to support the technetium (<sup>99</sup>Tc) removal program. USEC is responsible for the operations and maintenance of all leased facilities at PORTS until their lease is terminated and these facilities are returned to DOE.

The plant currently employs approximately 1700 workers. Employees reside primarily in Ohio, Kentucky, and West Virginia. The majority of Ohio employees live within the four counties surrounding the plant: Scioto, Pike, Ross, and Jackson.

#### 2. OVERVIEW OF NEPA REQUIREMENTS

#### **2.1 NEPA**

NEPA requires that all federal agencies anticipate and consider environmental consequences prior to undertaking major actions (DOE 1994). Agencies are required to evaluate and prepare a statement on the environmental impact of every proposal for a federal action "significantly affecting the quality of the human environment."

NEPA was enacted in 1969 and implemented in accordance with the President's Council on Environmental Quality regulations (40 CFR Parts 1500 through 1508). NEPA was enacted to ensure that environmental, technical, and economic considerations are factored into the decisions of federal agencies. NEPA requires a detailed evaluation of potential alternative actions, including a no action alternative, prior to the expenditure of significant federal funds. Although the emphasis traditionally is on environmental impacts during these evaluations, they are sufficiently broad to include other factors such as cost, schedule, socio-economics, waste management, transportation, and cumulative impacts with other ongoing or planned actions. Compliance with other environmental laws and regulations must also be evaluated. These typically include:

- The Resource Conservation and Recovery Act (RCRA);
- The Endangered Species Act;
- The Coastal Zone Management Act;
- The National Historic Preservation Act (NHPA);
- The Wild and Scenic Rivers Act;
- The Archaeological Resources Protection Act;
- The National Pollution Discharge Elimination System (NPDES) Storm Water Program mandated under the Clean Water Act (CWA);
- The NPDES Permitted Discharges Program mandated under the CWA;
- The Clean Air Act;
- The Toxic Substances Control Act (TSCA);

- The Floodplains/Wetlands Regulations;
- The American Indian Religious Freedom Act;
- The Farmland Protection Policy Act;
- The Fish and Wildlife Coordination Act; and
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

DOE implements its NEPA responsibilities through the DOE NEPA Rule (10 CFR 1021), DOE Orders, and various support and guidance documents. The DOE NEPA Compliance Program (DOE 2001) provides for effective planning and management of DOE NEPA processes.

The DOE NEPA Rule, Section 1021.400, identifies DOE actions that normally: (1) do not require the preparation of either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) (i.e., are categorically excluded from preparation of either document); (2) require the preparation of an EA, but not necessarily an EIS; and (3) require the preparation of an EIS.

If a DOE proposed action is not encompassed within one of these DOE actions, or if there are extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposed action, DOE will either: (1) prepare an EA and, on the basis of that EA, determine whether to prepare an EIS or a Finding of No Significant Impact (FONSI); or (2) prepare an EIS and a Record of Decision (ROD).

Regardless of the level of NEPA review, project design normally would not move beyond the preliminary (conceptual) stages until a decision is made to proceed with the action after evaluating the results of the NEPA review. The need for various permits would be identified in the NEPA document and might include permits such as: Ohio Permit-to-Install, Air Emission Source, NPDES, Solid Waste Landfill, RCRA Landfill, and TSCA Landfill. The permitting process would be handled directly with the permitting agencies as part of the design and construction process.

NEPA regulations provide information that specifically addresses the application of Categorical Exclusions (CX) for certain DOE actions. The DOE NEPA Implementing Regulations, Section 1021.400(a), provide direction for the application of CXs for DOE actions that do not require an EA or an EIS. Section 1021.400 of the DOE NEPA Implementing Regulations provides direction for the application of the appropriate level of NEPA review and provides a caveat for extraordinary circumstances that might allow DOE to proceed with an action in exception to this direction. Subpart D, Appendices A and B of the DOE NEPA Implementing Regulations provides a listing of classes of actions that DOE has determined do not individually or cumulatively have a significant effect on the human environment and thus may normally be categorically excluded.

The classes of actions that normally would lead to a CX include the following conditions as integral elements. To fit within the classes of actions that would normally require a CX, a proposal must be one that would not:

• Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;

- Require siting construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions;
- Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural
  gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted
  releases; or
- Adversely affect environmentally sensitive resources (e.g., construction of a building with its
  foundation above a sole-source aquifer or upland surface soil removal on a site that has wetlands). An
  action may be categorically excluded if, although sensitive resources are present on a site, the action
  would not adversely affect those resources.

If these criteria cannot be met, then either an EA or an EIS will need to be prepared. Classes of actions that normally would require the preparation of an EIS include such major DOE actions as siting, construction, operation, and decommissioning of whole facilities or adding main transmission systems.

An EA should normally be prepared for a proposed DOE action that is not clearly categorically excluded or does not clearly require the preparation of an EIS in order to assist agency planning and decision making.

A DOE EA shall serve the purposes identified in 40 CFR 1508.9(a), which includes providing sufficient evidence and analysis for determining whether to prepare an EIS or to issue a FONSI. An EA should include brief discussions of the need for the proposed action, alternatives to the proposed action including the no-action alternative, the environmental impacts of the proposed action alternatives, and a listing of agencies and persons consulted. If appropriate, a DOE EA should also include any floodplain/wetlands assessments prepared under 10 CFR Part 1022 and may include analyses needed for other environmental determinations.

NEPA requires DOE (and other federal agencies) to involve regulators and the public in decision making related to any undertaking that commits major expenditure of federal funds. If the undertaking is significant enough to warrant an EIS, the process is initiated by publishing a Notice of Intent (NOI) in the Federal Register to inform the public that an EIS will be prepared and to formally announce the beginning of the scoping process. The NOI describes the proposed action and the agency's preliminary plans regarding the consideration of reasonable alternatives and the analysis of potential impacts.

Mechanisms for public involvement are particularly at the forefront in NEPA implementation. Following the NOI, the next step in the process is to provide a public scoping meeting to facilitate the collection of public comments. DOE guidance documents provide substantial insight into the effective preparation and approach for facilitating public meetings as part of the NEPA implementation.

The development of the draft EIS involves identification of the competing potential alternatives, the collection of data and information to support the effective evaluation of the alternatives, and documentation of assumptions and methodologies used in the analysis. All reasonable alternatives are identified in the draft EIS. Once complete, the draft EIS is published for federal, state, local government, and public comments for a period of 45 days.

Comments are considered, responded to, and incorporated into the agency's decision, which is published as the final EIS. The final EIS identifies the agency's preferred alternative. Its publication is announced in the Federal Register in a Notice of Availability. A minimum 30-day waiting period is followed by the issuance of a ROD by the agency.

The ROD presents the agency's decision on the proposed action and the reasons for the decision, including environmental considerations and other factors such as cost and technical feasibility. The ROD is also published in the Federal Register. The ROD must include the identification of the most environmentally beneficial alternative, even if it is not the alternative that has been selected.

#### 2.2 CERCLA

Congress passed CERCLA in response to growing national concern about the release of hazardous substances from abandoned waste sites. CERCLA gives the federal government authority to regulate hazardous substances, to respond to hazardous substance emergencies, and to develop long-term solutions for the nation's most critical hazardous waste problems. The Superfund Amendments and Reauthorization Act expanded the federal government's response authorities and clarified that federal facilities are subject to the same CERCLA requirements as private industries.

Under CERCLA, the National Response Center must be notified of releases or threatened releases of hazardous substances above certain quantities (40 CFR 302) unless a federal permit authorizes the release. CERCLA's Community Right-to-Know requirements (40 CFR 350, 355, 370, 372) also mandate that state and local emergency response authorities be notified.

CERCLA response efforts are guided by the National Oil and Hazardous Substances Pollution Contingency Plan, commonly referred to as the National Contingency Plan (NCP). The NCP (40 CFR 300) describes the process that responsible parties (including federal agencies) must follow in response to releases of hazardous substances into the environment. The NCP establishes the criteria, methods, and procedures that the U.S. Environmental Protection Agency (U.S. EPA) uses to determine which releases have priority for long-term evaluation and response. The NCP's goal is to select remedies that protect human health and the environment, maintain protection over time, and minimize waste generation.

Under the NCP, response actions include remedial and removal actions. The remedial action process, which typically includes extensive studies to support remedy selection, may take several years to plan and complete. U.S. EPA and DOE agreed that generally decommissioning of facilities, where the primary release potential is the residual contamination remaining at the facility, would not warrant the extensive studies needed for remedial action remedy selection and therefore would be conducted using the simpler, more expedient, removal action process. NCP's removal actions are categorized as (1) emergency removal actions, (2) time-critical removal actions, and (3) non-time critical removal actions. The NCP requires public involvement in the removal action planning process, through the administrative record process, public notices/meetings, and other mechanisms. The NCP evaluates the need for removal actions based on impacts on human health and the environment, materials in bulk containers that may leak, threat of migration in soil and water, and the threat of fire.

Under CERCLA, the U.S. EPA prepares the National Priorities List (NPL), a prioritized list of highly contaminated sites. Candidate sites are selected after being ranked according to the Hazard Ranking System, which evaluates the relative risk of contaminated sites. Potential NPL sites are published in the Federal Register for public commenting. Sites placed on this list will have a Remedial Investigation/Feasibility Study (RI/FS) conducted and a ROD prepared to establish clean-up requirements. Once appropriately cleaned, sites will be delisted. For DOE facilities listed on the NPL, CERCLA requires DOE and the U.S. EPA to enter into an Interagency Agreement (IAG) defining the requirements for cleanup. PORTS is not currently considered an NPL site and is not a candidate site.

IAGs may also be entered into for non-NPL sites in order to incorporate RCRA requirements at CERCLA sites for facilities subject to both statutes so that there is only one, comprehensive agreement. The state is usually a party to the IAG. Among other things, IAGs establish the roles of DOE, U.S. EPA, and the state in completing the removal action. An IAG may contain provisions for public and stakeholder involvement in the removal action process. When no IAG exists for a site, or where an existing IAG does not address the removal action, DOE and U.S. EPA should identify the steps in the removal action process where U.S. EPA involvement can be most effective.

At facilities where CERCLA applies, the NCP mandates public involvement in the response action decision-making process. At facilities where RCRA applies, public involvement is governed by 40 CFR 270, EPA Administered Permits: The Hazardous Waste Management Program, or equivalent state regulations, or as specified in other state orders or agreements.

Preliminary plans are for DOE to conduct the D&D of PORTS as a non-time critical removal action under CERCLA with DOE acting as the lead agency. This approach is authorized by the Executive Order 12580: Superfund Implementation in which the President delegates authority vested in him by Section 115 of CERCLA to various government entities. Section 2 of Executive Order 12580 specifically states:

"(e)(1) Subject to subsections (a), (b), (c), and (d) of this Section, the functions vested in the President by Sections 104(a), (b), and (c)(4), and 121 of the Act (42 U.S.C. 9604(a), (b), (c)(4), 9621) are delegated to the heads of Executive departments and agencies, with respect to remedial actions for releases or threatened releases which are not on the National Priorities List ("the NPL") and removal actions other than emergencies, where either the release is on or the sole source of the release is from any facility or vessel under the jurisdiction, custody or control of those departments and agencies, including vessels bare-boat chartered and operated. The Administrator shall define the term "emergency", solely for the purposes of this subsection, either by regulation or by a memorandum of understanding with the head of an Executive department or agency."

The approach for implementing this delegated authority, agreed upon with U.S. EPA, is documented in the U.S. EPA/DOE Interagency Agreement *Policy on Decommissioning of Department of Energy Facilities Under CERCLA* (DOE 1995). This policy states that the National Contingency Plan designates DOE as the lead agency for responding to releases on, or where the sole source of the release is from, a facility under DOE's jurisdiction, custody, or control.

This Policy was signed in May 1995 by the Assistant Administrator of the U.S. EPA and by DOE's Assistant Secretary for Environmental Management. It establishes an agreement between U.S. EPA and DOE providing a tailored approach for decommissioning DOE's contaminated facilities as non-time critical removal actions. Subsequent guidance documents established a decommissioning framework (DOE 1999) that implements the requirements placed on decommissioning activities by the Decommissioning Policy and DOE Order O 430.1A (DOE 1998). This model for decommissioning DOE facilities has been designed explicitly to accommodate all types of regulatory scenarios under which decommissioning can be initiated. Although modeled after the process for conducting CERCLA non-time critical removal actions, the basic framework is flexible enough to accommodate all DOE decommissioning projects, regardless of the statute, authority, or management decision that initiates the project. This option usually provides benefits for worker safety, public health, and the environment, because it is typically faster and more cost effective than other options.

A common step in the CERCLA non-time critical removal action process and the DOE decommissioning model is the evaluation of alternatives. The Secretarial Policy on the National

Environmental Policy Act (NEPA) (DOE 1994), provides for incorporating NEPA values into CERCLA documents, such as analysis of cumulative, off-site, ecological, and socioeconomic impacts, to the extent practicable. If decommissioning is performed as a DOE decommissioning model process, an evaluation comparable to that which would be performed under a separate NEPA review should be incorporated under the step involving the evaluation of alternatives and no further NEPA review should be required.

#### 3. PRELIMINARY NEPA ACTIVITIES

#### 3.1 ENVIRONMENTAL EVALUATION CHECKLIST

Initial analysis to identify applicable federal, state, and local statutes that would affect a project typically would utilize an environmental review checklist. Completing a draft environmental review checklist for the D&D project as a preliminary NEPA/NEPA values activity, even though the scope has not at this time been thoroughly defined, would help expedite the formal NEPA/NEPA values process once the project is underway. DOE Portsmouth/Paducah Project Office (PPPO) has prepared such a checklist in the form of its Environmental Evaluation Checklist for projects at PORTS and PGDP. A copy of this checklist can be found in the Appendix of this report. This checklist has been partially completed as part of the preparation of this report, which was prepared based on current available details regarding the D&D project. As the project scope becomes better defined, this checklist can be refined so that by the time DOE is ready to begin the formal NEPA/NEPA values process, most of the preliminary applicability analysis has been completed.

#### 3.2 STAKEHOLDER COMMUNICATION

DOE's existing community relations program (DOE 2004) at PORTS, required by the 1989 Ohio Environmental Protection Agency Consent Order and U.S. EPA Administrative Order by Consent, has been in effect since the early 1990s. The program was designed to establish a communications program for providing information on DOE's Environmental Remediation Program on a timely basis, soliciting input from the public, and addressing the concerns and perceptions described in the preceding section. Communications efforts, therefore, place emphasis on the progress of the investigation and cleanup actions while providing an overall description of the environmental management activities and DOE missions at the site. These efforts include discussions on DOE missions such as transitioning the gaseous diffusion plant from CSB to CSD and preparing for future D&D of gaseous diffusion facilities; environmental remediation and monitoring activities; waste generation, storage, treatment, and disposal practices; management of the on-site storage of DUF<sub>6</sub> cylinders; health, safety, and emergency preparedness issues; and long-term stewardship and end-state land use. Public meetings are generally held every six months. This forum is an excellent venue for early communication with stakeholders regarding DOE's plans for the D&D project. As a preliminary NEPA/NEPA values activity, information on DOE's pre-D&D activities should continue to be communicated at these public meetings to solicit feedback that may help DOE in its early planning process (DOE 2003b and DOE 2003c). Once the formal NEPA/NEPA values process begins, these public meetings should continue in order to provide an important stakeholder communication tool regarding DOE's plans and decisions for the D&D project.

#### 3.3 HISTORIC PRESERVATION MEMORANDUM OF AGREEMENT

The NHPA, enacted in 1966, requires federal agencies to take into account the effects of their undertakings on historic properties. Consultations with Ohio's State Historic Preservation Office (SHPO) and consulting parties provide opportunity to comment on such undertakings. At the early stages of project planning the Sect. 106 process under the enacting regulations (36 CFR 800) seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess the project impact on these historic properties, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Compliance with NHPA is one of the items that is addressed during the NEPA/NEPA values process. Early resolution of historic preservation issues with SHPO could help expedite the NEPA/NEPA values process. One way of accomplishing this is through the preparation of a programmatic agreement between DOE and SHPO that addresses how potentially historic structures and other cultural resources will be managed during the D&D project. Efforts are underway at PORTS by the Site Remediation Contractor to prepare a draft programmatic agreement. These efforts should continue as a preliminary NEPA/NEPA values activity.

#### 3.4 EXISTING DOCUMENTATION

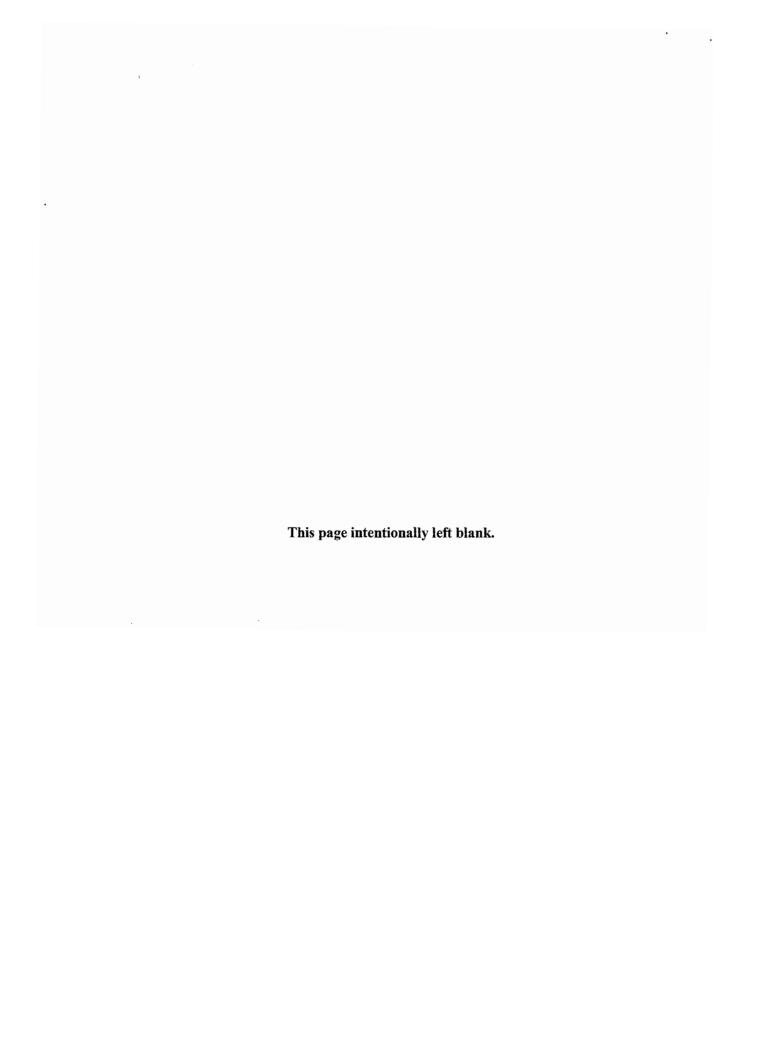
In implementing the NEPA/NEPA values process in the D&D project, use of existing documentation containing the results of previous studies at PORTS is expected to add efficiency and institutional knowledge to the project. Similarly, NEPA documents from other DOE facilities can be expected to provide insights into the processes used elsewhere. A listing of candidate reference documents, including an indication of the nature of the relevant information contained in it, will be prepared in advance of the start of the D&D project and the associated NEPA/NEPA values process. Such a listing could be expected, for example, to include any references used to provide answers to the questions on the environmental checklist described in Sect. 3.1 of this report.

#### 4. CONCLUSIONS

Whether the potential environmental impacts from the D&D of PORTS are formally conducted under the NEPA process or by incorporating NEPA values under the CERCLA process, there are several preliminary NEPA/NEPA values activities that should or are being done that will serve to expedite the formal NEPA/NEPA values process. These include:

- Preparation of an Environmental Evaluation Checklist;
- Addressing DOE's thoughts and plans regarding D&D of PORTS at semi-annual public meetings;
- Preparation of a Programmatic Agreement with SHPO regarding compliance with the NHPA; and

| <ul> <li>Preparation of a list of existing reference documents that are expected to contain useful NEPA-related<br/>data for PORTS and documents that describe NEPA efforts at other DOE facilities and provide<br/>important evaluation process information.</li> </ul> |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| These preliminary activities will provide early insight into potential environmental compliance issues facing DOE in the planning and execution of the D&D project at PORTS.   |  |  |  |  |  |  |  |  |
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#### 5. REFERENCES

- Code of Federal Regulations, 10 CFR Part 1021, DOE NEPA Implementing Procedures.
- Code of Federal Regulations, 10 CFR 1022, Compliance with Floodplain/Wetlands Environmental Review Requirements.
- Code of Federal Regulations, 36 CFR 800, Protection of Historic Properties.
- Code of Federal Regulations, 40 CFR 270, EPA Administered Permits: The Hazardous Waste Management Program.
- Code of Federal Regulations, 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan.
- Code of Federal Regulations, 40 CFR 302, Designation Reportable Quantities and Notification.
- Code of Federal Regulations, 40 CFR 350, 355, 370, 372, Emergency Planning and community Right-to-Know Regulations.
- Code of Federal Regulations, 40 CFR Parts 1500-1508, Regulations for Implementing NEPA.
- DOE (U.S. Department of Energy) 1994. Secretarial Policy Statement on the National Environmental Policy Act.
- DOE 1995. Memorandum, Policy on Decommissioning of Department of Energy Facilities Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- DOE 1998. Lifecycle Asset Management, DOE O430.1A.
- DOE 1999. Decommissioning Implementation Guide, DOE G 430.1-4.
- DOE 2000. The DOE Decommissioning Handbook, DOE/EM-0383.
- DOE 2001. National Environmental Policy Act compliance Program, DOE O 451.1B, Change 1.
- DOE 2003a. U.S. Department of Energy, Office of Management, Budget and Evaluation, *Project Management Practices, Project Execution Plan*, Rev. E.
- DOE 2003b. Public Participation and Community Relations, DOE P 141.2.
- DOE 2003c. U.S. Department of Energy, Office of Management, Budget and Evaluation, Communications and Stakeholder Participation.
- DOE 2004. Portsmouth Gaseous Diffusion Plant Corrective Measures Implementation Program, Program Community Relations Plan.

# APPENDIX ENVIRONMENTAL EVALUATION CHECKLIST



## U.S. Department of Energy Portsmouth/Paducah Project Office

#### **Environmental Evaluation Checklist**

PPPO-F-450.1 Revision 1 February 2006

#### National Environmental Policy Act Review

| Instructions:  • Complete bot                                    | th the NEPA and Permits  | nortion of the checklist  |   |
|--|--|---|---|
| -  |  | cklist with supplemental information to   | o the DOE Project Coordinator   |
|  | 1  | te to PPPO NEPA Compliance Officer  | 5   |
|  |  |   |   |
| Activity title and project i                                     |  | 1 C D'00 1 D  | Date: 7/24/06   |
| Decontamination and Dec  | commissioning of the Por   | tsmouth Gaseous Diffusion Plant   |   |
| Project contact name   | Telephone number   | DOE Project Coordinator   | Telephone number  |
| Activity start date  | Activity end date  | Estimated cost  | Activity location   |
| Activity description: This s developed/non-developed area,       |  | escription of the proposed activity. Be very specing building number, etc.)   | ific in explaining the purpose and location (a  |
| other facilities that are auxiliar equipment will be removed and | y to the gaseous diffusion proc<br>I disposed, the structures and a<br>ediated, as necessary. These ac | ess. The facilities will be characterized, the hauxiliary buildings will be demolished and disputions will eliminate the potential for future release | process equipment, process buildings, and the azardous materials will be abated, the process osed, and contaminated soils and groundwater ases of contaminants from the PORTS site in a |
|  |  |   |   |
| Summary:   |  |   |   |
| Detailed description: (Atta                                      | ch additional pages for descript   | ion if necessary and include reference document   | ts)   |
|  |  |   |   |
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## National Environmental Policy Act (NEPA) Checklist

| Checkist  |               |                        |
|---|---------------|------------------------|
| Questions to answer: *A checklist is required to be submitted, evaluated, and approved for all proposed site actions and projects that have the potential to meet any of the following:   | Yes           | No                     |
| 1. Will this activity result in a change in emissions, generation rates, or new discharge of hazardous, mixed, radioactive, asbestos, PCB, sanitary/industrial, solid or liquid waste, petroleum substance, wastewater, or any other pollutants from a facility or process?   | $\boxtimes$   |                        |
| 2. Will this activity be located in a previously developed area?  | M             |                        |
| 3. Will this activity involve siting, construction, modification, renovation, closure or D&D of facilities or processes?  |               | H                      |
| 4. Will this activity potentially affect environmentally sensitive areas/resources such as flood plain/wetlands,  | _             |                        |
| archeologically or historically significant areas, threatened or endangered species, and/or their habitat, special water sources (e.g. aquifer)?  |               |                        |
| 5. Will this activity involve site characterization, environmental monitoring, or R&D programs?   | $\boxtimes$   |                        |
| 6. Will this activity involve any type of land disturbance, underground storage tank (UST), or subsurface injection/extraction?   | $\boxtimes$   |                        |
| 7. Will this activity involve a site evaluation area, RCRA/CERCLA area/facility?  | $\boxtimes$   |                        |
| *Note:  |               |                        |
| <ul> <li>If any unknown, call DOE PPPO NEPA Compliance Officer or Project Environmental Coordinator for consultation</li> <li>Consult with DOE PPPO NEPA Compliance Officer or Project Environmental Coordinator; file with project &amp; complete</li> <li>If any are marked "Yes", complete rest of NEPA checklist and permits checklist</li> </ul> | e permits che | cklist                 |
| Environmental Impacts Evaluation (Note: If any are "Yes", provide specifics/supplemental info   | ormation.)    |                        |
| Air   | K7            |                        |
| Will there be a new air emission or a change in the quantity of an existing air emission?  Sumface Water.   | $\boxtimes$   | Ш                      |
| <ul> <li>Surface Water</li> <li>Will there be a liquid release to streams, swamps, wetlands, seepage basins, storm drains, process sewers, ponds, or</li> </ul>   |               |                        |
| lakes?  |               |                        |
| Will river or stream water be utilized?   |               |                        |
| Groundwater   | <del></del>   | <b>5</b> 2             |
| Will there be a discharge to subsurface/groundwater?  Will are a basic to be a discharge to subsurface/groundwater?   |               |                        |
| Will groundwater be utilized?   | $\boxtimes$   |                        |
| Safety  Is there a potential exposure to hazardous substances (e.g. radiological/toxic/chemical materials)?   | $\square$     |                        |
| Is there a potential for explosion or criticality?  | X             | <u> </u>               |
| Does action involve transportation of hazardous materials?  |               |                        |
| Natural/Cultural Resources  |               | <u> </u>               |
| • Is there a potential for impacts on wetlands, swamps, streams, river beds, ponds, set aside areas?  |               |                        |
| • Is there a potential impact on fish/wildlife resources or habitats?   |               |                        |
| • Is there a potential impact on protected species (e.g. sensitive, rare, threatened, or endangered)?   |               | $\overline{\boxtimes}$ |
| Is there a potential for impacting archaeological and historical sites?   |               |                        |
| Does this action require an excavation permit?  | X             |                        |
| For DOE PPPO NEPA Compliance Officer use only (NEPA recommendation)   |               |                        |
| Are there potential cumulative effects when combined with other actions?  |               |                        |
| • Is the proposed activity a component of a larger line item project?   |               |                        |
| Write in document title or reference  |               |                        |
| number:  CX applied for by DOE Project Coordinator (Must meet all requirements of 10 CFR 1021.410(b)):  |               |                        |
| Covered by previous NEPA documentation (CX, EA, EIS): (Write in document title or reference number)   | <del></del>   |                        |
| Covered by previous (VL) A documentation (CA, EA, Els). (While in document the of ference number)   |               |                        |
| Additional NEPA documentation required: EA EIS Revised ROD Revised FO   | ONSI 🗀        | EE/CA                  |
| DOE Project Coordinator signature  Date checklist completed:  | 01101         | DL/ C/1                |
| Date of continue to a protect.  |               |                        |
| For DOE PPPO NEPA Compliance Officer Use Only (NEPA determination)  |               |                        |
|   |               |                        |
|   |               |                        |
| Approved Approved - with comments NOT approved - alternate NEPA   | action req    | uired                  |
| DOE PPPO NEPA Compliance Officer signature Date of signature:   |               |                        |
|   |               |                        |

#### Environmental Permits Checklist

| Wastes  |              |             |                                       |   |       |                     | Yes         | No   |  |
|---|--------------|-------------|---------------------------------------|---|-------|---------------------|-------------|--|--|
| Will the proposed activity install, construct, modi   | fy, demolis  | h, close, c | or otherwise impact a RC              | CRA p   | erm   | itted facility?     |             |  |  |
| <ul> <li>Will the proposed activity generate a mixed waste</li> </ul>   | e?           |             |                                       |   |       |                     | $\boxtimes$ |  |  |
| <ul> <li>If "Yes", does a waste stream with similar charac</li> </ul>   |              | rently exi  | st at the site?                       |   |       |                     | X           |  |  |
| Will the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed activity generate a hazardous was a second of the proposed of the p | vaste?       |             |                                       |   |       |                     |             |  |  |
| • Is the TSD permitted to accept this waste?  |              |             |                                       |   |       | •                   | . LJ        |  |  |
| (If "Yes", provide the following) Name of receiving facility  |              |             |                                       |   |       |                     |             |  |  |
| Name of receiving facility  |              |             |                                       |   |       |                     |             |  |  |
| Source used to confirm facility can accept waste:   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
| • Is this activity to take place at an existing TSD?  |              |             |                                       |   |       |                     | <u> </u>    |  |  |
| Would this activity impact an existing TSD?   |              |             |                                       |   |       |                     |             | Ш  |  |
| (If "Yes", answer the following)  | Yes          | No          |                                       |   |       |                     | Yes         | No   |  |
| Does it involve polychlorinated   |              |             |                                       |   |       |                     | 7.05        | 110  |  |
| biphenyls (PCB)?  |              |             |                                       |   |       |                     |             |  |  |
| Will this activity continue for more than   |              |             | <ol><li>Does it involve t</li></ol>   |   |       |                     | _           | _  |  |
| 30 days?  |              | ŀ           | waste on the land or                  |   |       | ing of hazardous    |             |  |  |
| W/-4-IJ-4:C-4: C4: JM   |              |             | · · · · · · · · · · · · · · · · · · · | waste'  | !     |                     | 17.00       | TAT .  |  |
| Waste Identification, Generation and M  |              |             | DA/OFDOLA                             |   | 14    | 0                   | Yes 🖂       | No   |  |
| <ul> <li>Will the proposed activity disturb soil, sludge or</li> <li>If "Yes", were any listed wastes disposed of at th</li> </ul>  |              | near a KC   | RA/CERCLA unit of si                  | ite eva   | iuati | on area?            |             | <del>                                     </del> |  |
| Does this activity result in a new liquid and/or so   |              | eneration   | one-time or continuous                | e) ora  | cha   | nge in the          | X           | ┟╫╌  |  |
| quantity or the characteristic of an existing waste   |              |             |                                       | 5), OI a  | Ciia  | ilge in the         |             | -  |  |
| ☑ TRU ☑   | Hazardo      |             |                                       | X   | ]     | TSCA (PCB)          |             | ·  |  |
| Mixed − Covered by FFCA   |              | hazardous   |                                       |   |       | Wastewater          |             |  |  |
| ✓ Low-level   |              | /Industria  |                                       |   |       | Acute Hazardous     |             |  |  |
| High-level  | Used/Wa      | aste Oil    |                                       | L 🖵   | ]     | Other               |             |  |  |
| Where will the waste be stored/disposed/treated?  |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
| Is the facility permitted to manage this waste?   |              |             |                                       |   |       |                     |             |  |  |
| If "Yes", complete the following items and submit   | with the cl  | ıecklist    |                                       |   |       |                     |             |  |  |
| Source utilized to confirm facility is permitt  | ted to accep | t the wast  | e                                     |   |       |                     |             |  |  |
| Description of generated waste  |              |             |                                       |   |       |                     |             |  |  |
| Dates generation is to begin/end Estimate of waste generation rate for each c   | atonom.      |             |                                       |   |       |                     |             |  |  |
| Description of activity/process generating w  |              |             |                                       |   |       |                     |             |  |  |
| Description of waste reduction principles (r  |              | volume.     | mass, or toxicity) for the            | is activ  | vity  |                     |             |  |  |
| Is there a waste disposition location and aff   | iliated sche | dule? If ye | es please provide location            | on and  | proj  | posed schedule as a | ttachment.  |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
| Has the proposed activity been evaluated for was  | te minimiz   | ation/polli | ition prevention?                     |   |       |                     | <u> </u>    |  |  |
| For Project Environmental Coordinator use only:   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
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|   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       |   |       |                     |             |  |  |
| Project Environmental Coordinator signatu   | ıre          |             | Date checklist co                     | Project Environmental Coordinator signature Date checklist completed: |       |                     |             |  |  |
| Date checklist completed:   |              |             |                                       |   |       |                     |             |  |  |
|   |              |             |                                       | шріс  | icu.  |                     |             |  |  |

#### Environmental Permits Checklist

| _           |  | Van          | Na          |  |  |  |  |  |
|-------------|--|--------------|-------------|--|--|--|--|--|
| Ge          | neral:   | Yes          | No          |  |  |  |  |  |
| •           | Does this activity involve any land disturbance which may potentially result in erosion or sedimentation?  |              |             |  |  |  |  |  |
|             | "Yes", what is the approximate disturbance?) Less than ½ acre ☐ ½ acre to 1 acre ☐ 1 to 2 acres ☒ Greater than 2 acres   |              |             |  |  |  |  |  |
| •           | Will the proposed activity install, modify, or remove an (including tie-in to) underground storage tank?   | $\boxtimes$  |             |  |  |  |  |  |
| •           | Will the proposed activity consist of a renovation or demolition to an existing building/structure?  | $\boxtimes$  |             |  |  |  |  |  |
| (Ple        | ease specify) 🔲 Renovation 🛛 Demolition  |              |             |  |  |  |  |  |
| •           | ls asbestos containing material present?   |              |             |  |  |  |  |  |
| <i>If</i> " | No", inspector signature and license number required:  |              |             |  |  |  |  |  |
| Inc         | pector signature: License Number: Date:  |              |             |  |  |  |  |  |
| 1113        | Decisi signature.  |              |             |  |  |  |  |  |
|             |  |              |             |  |  |  |  |  |
| •           | Will you import or manufacture a new chemical substance?   |              | <u> </u>    |  |  |  |  |  |
|             | Will the proposed activity impact a site evaluation area or RCRA/CERCLA area or an associated 200 foot buffer zone?  Will the proposed activity involve construction or modification, or to a facility or process where the potential exists for a                         |              |             |  |  |  |  |  |
|             | radioactive emission?  |              |             |  |  |  |  |  |
|             | Will pesticides/herbicides be applied?   |              | $\boxtimes$ |  |  |  |  |  |
| Air         | · · · · · · · · · · · · · · · · · · ·  |              |             |  |  |  |  |  |
| •           | Will the proposed activity impact a non-radionuclide air emission source? (The answer is "Yes" if any of the following   | <b>F</b>     |             |  |  |  |  |  |
|             | are true:)   |              |             |  |  |  |  |  |
|             | <ol> <li>Will the project install or modify a piece of equipment which will emit, or have the potential to emit, an air emission</li> <li>Will the project modify (including demolition) an existing permitted facility or process, which emits an air emission</li> </ol> |              |             |  |  |  |  |  |
|             | 3. Will the project modify (including demolition) an existing facility or process, which emits, or has the potential to en   | nit an air   |             |  |  |  |  |  |
|             | emission?  4. Will the project be a demonstration (short term or long term) of a new technology which will emit an air emission?   |              |             |  |  |  |  |  |
|             | 5. Will the project install or modify a piece of equipment that is used to sample or monitor air emissions?  |              |             |  |  |  |  |  |
|             | emissions include regulated criteria pollutants (i.e., particulate matter, lead, nitrogen oxides, carbon monoxide, sulfur dioxi  | de, volatile | organic     |  |  |  |  |  |
| con         | npounds, etc.) and hazardous and toxic pollutants identified in the Clean Air Act.   |              |             |  |  |  |  |  |
| Exa         | amples of typical permitted equipment or process air emission sources include, but are not limited to the following:   |              |             |  |  |  |  |  |
| •           |  |              |             |  |  |  |  |  |
| •           |  |              |             |  |  |  |  |  |
| •           | Diesel powered equipment  • Air strippers  |              |             |  |  |  |  |  |
| •           | Process feed chemical storage tanks  • Degreasing operations   |              |             |  |  |  |  |  |
| •           | Fuel oil storage tanks  • HVAC and chiller equipment   |              |             |  |  |  |  |  |
| ·<br>C:     | Waste combustion incinerators  |              |             |  |  |  |  |  |
|             | Will the proposed activity install a monitoring well, abandonment of a well, or piezometer(s)?   |              |             |  |  |  |  |  |
| :           | Will the proposed activity install a monitoring well, abandonment of a well, or piezometer(s)?  Will the proposed activity involve subsurface penetration for hydrogeological investigation, geotechnical data collection,   |              |             |  |  |  |  |  |
| •           | or characterization?   |              |             |  |  |  |  |  |
| •           | Will the proposed activity involve the injection of a fluid, gas, or air mixture into the subsurface?  |              |             |  |  |  |  |  |
| •           | Will the proposed activity involve the extraction of a fluid or air mixture from the subsurface?   |              |             |  |  |  |  |  |
| W           | astewater:   |              |             |  |  |  |  |  |
| •           | Will the proposed activity install, construct, modify, demolish, or impact a sanitary/industrial process wastewater treatment system?  | $\boxtimes$  |             |  |  |  |  |  |
| •           | Will the proposed activity install, construct, modify, demolish, or impact a sanitary/industrial process wastewater  | $\boxtimes$  |             |  |  |  |  |  |
|             | collection system?  Will the proposed activity install, construct, modify, demolish, or impact a pump station to transfer sanitary/industrial  |              |             |  |  |  |  |  |
| waste?      |  |              |             |  |  |  |  |  |
| •           | Will the proposed activity install, construct, modify, demolish, or impact a septic tank/tile field system?  |              |             |  |  |  |  |  |
| -           | Will the proposed activity install, construct, modify, demolish, or impact a storm water management system?  |              |             |  |  |  |  |  |
|             | omestic Water:   |              |             |  |  |  |  |  |
| •           | Will the proposed activity install, construct, modify, or demolish a domestic water distribution/treatment system?   |              |             |  |  |  |  |  |
| P.          | Will the proposed activity install, construct, modify, or demolish a domestic or process water well?   |              |             |  |  |  |  |  |
| Pro         | oject Environmental Coordinator signature Date checklist completed:  |              |             |  |  |  |  |  |
|             |  |              |             |  |  |  |  |  |